

Claimed are:

1. A joint prosthesis comprising:

a head member so sized and shaped as to be articulatable with a joint socket, the

5 head member defining a head bore;

a proximal body member that includes:

a base;

a plug protruding from the base and so sized and shaped as to be receivable
in the head bore; and

10 a spigot protruding from the base, the spigot including a locking band whose
cross-sectional geometry is uniform transverse to the spigot's axis;
and

a stem member that includes:

a proximal portion defining a stem bore that:

15 is sized and shaped for receiving the spigot; and

includes a receiving portion whose cross-sectional geometry is

uniform transverse to the bore's axis and is sized smaller than

that of the locking band for engaging the locking band of the

spigot by friction-tight press-fit as the proximal body member

20 becomes fully seated on the stem member; and

a shaft extending from the proximal portion, being sized and shaped for

seating in a cavity of a long bone, and including a midshaft portion

and a distal portion of the stem member, at least a portion of the

midshaft and/or the distal portion so tapered that the cross-sectional area of the shaft in that portion continuously decreases from its proximal end to its distal end.

2. The joint prosthesis of claim 1, wherein the locking band and the receiving portion
5 are substantially cylindrical.
3. The joint prosthesis of any preceding claim, wherein the spigot of the proximal body member further includes a second locking band located further from the base of the proximal body than the first locking band, the second locking band having a constant cross-sectional geometry along the length of the second locking band, and
10 a cross-sectional area that is smaller than the receiving portion of the stem bore for the first locking band.
4. The joint prosthesis of claim 3, wherein the bore of the stem member includes a receiving portion with a constant cross-sectional geometry that is equal to or smaller than that of the second locking band of the spigot of the proximal body member, for
15 engaging the second locking band of the spigot as the proximal body member becomes fully seated on the stem member.
5. The joint prosthesis of claim 4, wherein the second locking band and the receiving portion for the second locking band are substantially cylindrical.
6. The joint prosthesis of claim 5, wherein both locking bands of the spigot of the proximal body member and both receiving portions of the bore of the stem member
20 are substantially cylindrical.
7. The joint prosthesis of claim 6, wherein the locking bands of the spigot of the proximal body member are co-axial.

8. The joint prosthesis of any preceding claim, wherein the distal portion of the shaft of the stem member is generally round in cross-section.
9. The joint prosthesis of any preceding claim, wherein the proximal portion of the stem member is tapered in the medial-lateral dimension only.
- 5 10. The joint prosthesis of any preceding claim, wherein the proximal portion of the stem member is tapered in both the medial-lateral and the anterior-posterior directions.
11. The joint prosthesis of any preceding claim, wherein the base of the proximal body member defines at least one receptacle.
- 10 12. The joint prosthesis of claim 11, wherein the stem member further comprises a key protruding from the proximal end, the key so positioned as to be received in the at least one receptacle of the proximal body member as the stem bore receives the spigot.
13. The joint prosthesis of claim 12, wherein the base of the proximal body member
15 further defines a plurality of receptacles, and the key is selectively positionable in one of the plurality of receptacles.
14. The joint prosthesis of claim 12 or claim 13, wherein the key of the stem member is substantially cylindrical.
15. The joint prosthesis of any of claims 12-14, wherein at least one receptacle of the
20 proximal body member is substantially cylindrical.
16. The joint prosthesis of claim 12, wherein the key is located in the proximal body member and the plurality of receptacles are located in the stem member.

17. The joint prosthesis of any preceding claim, wherein the proximal body member defines a hole that passes through the spigot.
18. The joint prosthesis of claim 17, wherein the stem member defines a hole at the base of the bore.
- 5 19. The joint prosthesis of claim 18, wherein the hole of the stem member is so threaded as to receive a threaded bolt.
20. The joint prosthesis of claim 19, wherein the hole of the proximal body is coaxial to the hole of the stem member.
21. The joint prosthesis of any of claims 18-20, further comprising a bolt so passing
10 through the hole of the proximal body and the hole of the stem member as to engage the stem member.
22. The joint prosthesis of any of claims 18-21, further comprising a bolt so passing through the hole of the proximal body and the hole of the stem member as to engage the stem member and the proximal body member.